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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,710	02/03/2004	William Ray Wenzel	LAMA122354	2286
26389	7590	09/14/2005	EXAMINER	
CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE SUITE 2800 SEATTLE, WA 98101-2347			BOMAR, THOMAS S	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/770,710

Applicant(s)

WENZEL, WILLIAM RAY

Examiner

Shane Bomar

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 3,088,529 to Cullen et al.

Cullen et al disclose a downhole drilling motor with a stator housing 15 having an exterior surface with vanes 50-52 (see Figs. 1, 2B, 8, and 9). Cullen et al also inherently disclose a method for stabilizing the motor because the flow of drilling fluid that returns upwardly from the bore bottom and exteriorly past the vanes 50-52 must inherently create an area of pressure differential that will prevent differential sticking as is notoriously known in the art.

3. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4,492,276 to Kamp.

Kamp discloses a downhole drilling motor with a stator housing 1 having an exterior surface with vanes 10A and 10B (see Figs. 1-3). Kamp also inherently discloses a method for stabilizing the motor because the flow of drilling fluid that returns upwardly from the bore bottom and exteriorly past the vanes 10A and 10B must inherently create an area of pressure differential that will prevent differential sticking as is notoriously known in the art.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cullen et al or Kamp in view of US patent 3,419,094 to Bobo.

While it has been shown above that either Cullen et al or Kamp inherently teach the method of claim 1, it is conceded that the teaching is not explicit.

Bobo teaches vanes, or stabilizers, 13 and 15 that define passageways 18 and 19 (see Figs. 1, 2, and 5-7). It is further taught that these passageways act to alleviate differential pressure sticking of the drill string while return fluids are passing upwardly therethrough (see col. 5, lines 24-32). It would have been obvious to one of ordinary skill in the art, having the teachings of Cullen et al or Kamp and Bobo before him at the time the invention was made, to modify the method taught by Cullen et al or Kamp to include the teaching or preventing differential pressure sticking of Bobo, in order to obtain a drill string that will not become stuck in the borehole. One would have been motivated to make such a combination since Bobo has shown it to be notoriously known in the art that the placement of vanes, or stabilizers, on the exterior surface of a drill string, or motor, will alleviate sticking of the drill string due to the area of pressure differential created by the return fluids flowing by said vanes.

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6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cullen et al or Kamp in view of US patent 4,792,000 to Perkin et al.

Cullen et al and Kamp both teach the drilling motor of claim 2 that has vanes on the exterior surface. However, it is not explicitly taught that the vanes are attached to threaded portions of the stator housings via correspondingly threaded mounting sleeves.

Perkin et al teach a downhole drilling tool similar to that of either Cullen et al or Kamp. It is further taught that vanes 58, or stabilizer blades, are mounted to threaded portions of a housing via threaded mounting sleeves 26 or 60 (see Figs. 2-3 and columns 12-15, especially col. 14, line 48 through col. 15, line 33). It would have been obvious to one of ordinary skill in the art, having the teachings of Cullen et al or Kamp and Perkin et al before him at the time the invention was made, to modify the vanes taught by Cullen et al or Kamp to include the threaded mounting sleeves of Perkin et al, in order to obtain a vane, or stabilizer, that is easily replaceable. One would have been motivated to make such a combination since Perkin et al have shown it to be notoriously known in the vane/stabilizer art that threaded mounting sleeves are interchangeable with other types of known mounting methods.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Alexander teaches that simply keeping the drill string away from the borehole wall prevents differential sticking (see the Abstract). Boulet, Fox, Gilbert, Gruppig, Moore et al, Terry, Toelke, and Trinder et al teach other downhole tool configurations of specific interest.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday - Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David J. Bagnell  
Supervisory Patent Examiner  
Art Unit 3672



tsb  
September 8, 2005